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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/284,828

04/21/99

PETSCHEK

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CWR2242

IM22/0321

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EXAMINER

WU, S

ART UNIT

PAPER NUMBER

1756

DATE MAILED:

03/21/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/284,828**

Applicant(s)  
**Petschek et al.**

Examiner  
**Shean C. Wu**

Group Art Unit  
**1756**



☐ Responsive to communication(s) filed on \_\_\_\_\_.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☒ Claim(s) 19-20 is/are allowed.

☒ Claim(s) 1-4, 7-8, 10 and 16-17 is/are rejected.

☒ Claim(s) 5, 6, 9, 11-15, and 18 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gohy et al. (Macromolecules 1996, 29, 3376-3383).

The reference discloses a liquid crystal polyionomer containing a low molecular weight ionic mesogenic group. See the section of "Introduction" and polymer synthesis in "experimental Part", third and fourth paragraphs on page 3378 and Figure 7. The reference composition anticipates the claimed invention. Although the reference does not teach the use of the reference

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composition for attaining buff-free alignment of liquid crystal on a liquid crystal display device, mere statement of a new use for an otherwise old or obvious composition cannot render a claim to the composition patentable.—In re Zierden (CCPA) 162 USPQ 102.

4. Claims 1-4 and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cheng et al. (Mol. Cryst. Liq. Cryst., 1995, Vol. 269, 1-38).

The reference discloses a liquid crystal polyionomer containing a low molecular weight ionic mesogenic group. See the abstract and Table 1 on page 5. Although the reference does not teach the use of the reference composition for attaining buff-free alignment of liquid crystal on a liquid crystal display device, mere statement of a new use for an otherwise old or obvious composition cannot render a claim to the composition patentable.—In re Zierden (CCPA) 162 USPQ 102.

5. Claims 1, 7-8, 10 and 16-17 are rejected under 35 U.S.C. 102(e) as anticipated by Rhee et al. (US 5,639,398).

The reference discloses a conductive liquid crystal polyionomer alignment layer containing a low molecular weight ionic mesogenic group. The conductive liquid crystal polymer is dissolved into a polar solution such as water and dimethylsulfoxide. The reference polymer can

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coat on ITO glass by drying method (see col. 5, line 1 to col. 7, line 39). The reference anticipates the claimed invention.

6. Claims 5-6, 9, 11-15 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 19 and 20 are allowed.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

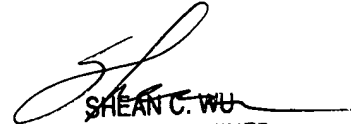
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wu whose telephone number is (703) 308-3956. This examiner can normally be reached on Monday through Friday from 9:30 a.m. to 6:00 p.m. in the eastern time zone. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Sharon Gibson, can be reached on (703) 308-4552. The group 1756 FAX machine numbers are (703) 305-5408 or 703-305-3599 (2nd Fax number is designated for Office Action After Final). Unofficial correspondence transmitted by FAX must be marked "DRAFT". All other papers received by FAX will be treated as Official communications and cannot be immediately handled by

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the Examiner. Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1700 receptionist whose telephone number is (703)-308-0661.

  
SHEAN C. WU  
PRIMARY EXAMINER  
GROUP 1200